

3M General Offices
3M Center
St. Paul, Minnesota 55144-1000
(612) 733-1110

00-46
783

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET

3M

DIVISION: ADHESIVES, COATINGS AND SEALERS
TRADE NAME:
3M 90 High Strength Adhesive
3M I.D. NUMBER: 62-4976-4930-1

Industrial Hygiene

FEB 24 1989

ISSUED: JANUARY 27, 1989
SUPERSEDES: OCTOBER 25, 1988
DOCUMENT: 10-3309-1

1. INGREDIENT	C.A.S. NO.	PERCENT	EXPOSURE VALUE UNIT	LIMITS -- TYPE AUT
methylene chloride	75-09-2	40.0 - 50.0	50 ppm	TWA ACG
isobutane	75-28-5	20.0 - 30.0	NONE NONE	NONE NON
propane	74-98-6	10.0 - 20.0	1000 ppm	TWA OSH
non-volatile components - N.J. Trade Secret (T.S.) Registry No. 04499600-5481P	T.S.	1.0 - 10.0	NONE NONE	NONE NON
cyclohexane	110-82-7	1.0 - 10.0	300 ppm	TWA ACG

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

methylene chloride
cyclohexane

2. PHYSICAL DATA

BOILING POINT:..... Compressed gas
VAPOR PRESSURE:..... Compressed gas
VAPOR DENSITY: 2.93 Air = 1
EVAPORATION RATE:..... 1.80 Ether = 1
SOLUBILITY IN WATER: Nil
SP. GRAVITY:..... N/A
PERCENT VOLATILE: 89.00 %
VOLATILE ORGANICS: 336.00 gm/l
pH: N/A
VISCOSITY: N/A
APPEARANCE AND ODOR: Clear-white, liquid, methylene chloride odor

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... -50.00 F
FLAMMABLE LIMITS - LEL: N/D
FLAMMABLE LIMITS - UEL: Flam. Gas
AUTOIGNITION TEMPERATURE: ... N/D
EXTINGUISHING MEDIA:
CO2, foam, dry chemical
SPECIAL FIRE FIGHTING PROCEDURES:
Treat as a pressurized container. Fire fighters should be equipped with self-contained breathing apparatus when fighting fires involving this material.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Extremely Flammable. Treat as a pressurized container. Overheated,

Abbreviations: N/D - Not Determined N/A - Not Applicable

BOE-C6-0229797

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3. FIRE AND EXPLOSION HAZARD DATA (continued)

pressurized aerosol cans adjacent to fire could explode due to pressure buildup.
NFPA-HAZARD-CODES: HEALTH 2 FIRE 4 REACTIVITY 0
UNUSUAL REACTION HAZARD: NONE

4. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
N/A
CONDITIONS TO AVOID: Do not puncture or incinerate. Do not store at temperatures above 120F.
HAZARDOUS POLYMERIZATION: Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:
CO, CO₂, HCl and possible trace amounts of chlorine and phosgene when subjected to excessive heat or flame.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

If cans rupture, observe precautions from other sections. Extinguish all ignition sources and ventilate area. Contain spill. Cover with absorbent materials as needed. Collect spilled material. Place absorbed product and partially full cans in a U.S. Dept. of Transportation-approved metal container and seal.

RECOMMENDED DISPOSAL:

Incinerate absorbed product and partially full cans after mixing with flammable material in a licensed hazardous waste facility. Dispose of empty cans in a sanitary landfill. Disposal should be in accordance with applicable regulations. (U.S. EPA Hazardous Waste No.: D0001 (Ignitable)).

ENVIRONMENTAL DATA:

Volatile Organic Compound (VOC):
Maximum VOC = 336 grams/liter.
Maximum VOC minus Water minus Exempt Solvents = 469 grams/liter.

SARA HAZARD CLASS:

FIRE HAZARD: Yes PRESSURE: Yes REACTIVITY: No ACUTE: Yes CHRONIC: Yes

6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water for at least 10 minutes. Call a physician.

SKIN CONTACT:

Wash with soap and water.

INHALATION:

Provide fresh air. Call a physician.

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6. SUGGESTED FIRST AID (continued)

IF SWALLOWED:

Do not induce vomiting. Immediately call a physician or poison control center.

OTHER FIRST AID:

NONE

7. PRECAUTIONARY INFORMATION

Keep product and its vapor away from heat, sparks, flame and other sources of ignition. The vapors released by the product can be ignited easily and burn explosively. Avoid vapor contact with open flames, welding arcs or other high temperature sources which might cause vapor decomposition to produce harmful gases. Avoid breathing vapor and spray. Prevent eye contact. Avoid prolonged contact with skin. Use only in areas with sufficient ventilation to maintain vapor and spray concentrations below the recommended exposure limits. For high volume usage, local exhaust ventilation may be needed. Wear protective equipment such as safety glasses and impervious gloves when handling product. Do not puncture or incinerate container. Do not store product at temperatures above 120F. Use only as directed. Do not take internally. KEEP OUT OF THE REACH OF CHILDREN.

ADDITIONAL EXPOSURE LIMITS

INGREDIENTS	EXPOSURE LIMITS		-----	
	VALUE	UNIT	TYPE	AUTH
methylene chloride	1000	NONE	NONE	OSHA
methylene chloride	500	ppm	TWA	OSHA
methylene chloride	2000	ppm	STEL	OSHA
methylene chloride	175	mg/m3	TWA	ACGIH
propane	1800	mg/m3	TWA	OSHA
cyclohexane	1050	mg/m3	TWA	ACGIH
cyclohexane	300	ppm	TWA	OSHA
cyclohexane	1050	mg/m3	TWA	OSHA

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration

8. HEALTH HAZARD DATA

EYE CONTACT: Liquid and spray may cause eye irritation upon direct co

SKIN CONTACT: Prolonged skin contact may defat the skin causing irritation, possibly leading to dermatitis.

INHALATION: Exposure to methylene chloride and cyclohexane vapor concentrations exceeding the recommended exposure limits may cause respiratory system irritation and temporary nervous system impairment. Symptoms of overexposure are irritation, dizziness, headache and nausea. Methylene chloride may cause carbon monoxide

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8. HEALTH HAZARD DATA (continued)

poisoning, a particular hazard to persons with cardiovascular disease. Chronic (long-term) overexposure to methylene chloride may cause lung, liver and heart damage. Gross acute (short-term) overexposure can result in numbness, heart damage and in the extreme, unconsciousness and death. Intentional misuse by deliberately concentrating and inhaling or swallowing the contents can be harmful or fatal.

INGESTION: Accidental ingestion is unlikely from an aerosol container. However, ingestion may cause digestive system irritation with nausea and vomiting, and nervous system impairment. Solvent aspiration into the lungs as a result of vomiting may cause lung damage.

EYE CONTACT: NOTE: Studies on rats and mice subjected to high vapor concentrations establish methylene chloride as an animal carcinogen. However, the Halogenated Solvents Industry Alliance (HSIA) recognized that the human body handles methylene chloride differently than mice and rats. Based on the metabolic differences, HSIA concluded that 'methylene chloride is very unlikely to cause cancer in humans.'

SECTION CHANGE DATES

ENVIRON. DATA SECTION CHANGED SINCE OCTOBER 25, 1988 ISSUE

Abbreviations: N/D - Not Determined N/A - Not Applicable

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.

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